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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/527,640

03/14/2005

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EXAMINER

PRATT, HELEN F

ART UNIT

PAPER NUMBER

1794

MAIL DATE

DELIVERY MODE

08/11/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/527,640	Applicant(s) APPELQVIST ET AL.	
	Examiner Helen F. Pratt	Art Unit 1794	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 June 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7 and 10-15 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 7 and 10-15 is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Belmar et al. (WO 99/65328) in view of Mersfelder et al. (4,547,375).

Belmar et al. disclose a process of making a thickening agent and product thereof, which can be used for thickening foodstuffs (abstract and page 7, lines 10-20, page 8, lines 1-8, page, page 11, lines 9-24, page 12, lines 1-15). The homogenized carrots are considered to be a second portion containing PME (pectin methyl esterase). The tomatoes are considered to be the PME deactivated first portion. Tomatoes are considered to fall into one of the cited categories. The ratio falls within the claimed

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amounts as in claims 1 and 2. Claims 1 and 2 differ from the reference in whether the tomato sauce has the PME deactivated. Mersfelder et al. teach that PME must be deactivated in tomatoes or else the product will be of low consistency, i. e. thin and watery (col. 1, lines 12-23). Therefore, it would have been obvious to use known ingredient such as carrots and add tomatoes to make the claimed product in the claimed ratio.

Claim 3 further requires that the portions are from the same vegetable or fruit species. However, as it is known to deactivate one portion and use another portion contains PME, it would have been within the skill of the ordinary worker to use fruits or vegetables which would be suitable to make the claimed product. Therefore, it would have been obvious to use known products for their known functions.

Claim 4 further requires that the PME deactivation step is carried out by a hot break process. Such a process is so well known in tomato processing that it hardly needs a reference. Therefore, it would have been obvious to make a composition containing the tomatoes from a hot break process.

Claim 5 further requires that the fruit or vegetable mixture is incorporated in the product in particular amounts and claim 6 that the product is a food product. However, it is well known to use tomato based products in numerous products such as soups, and sauces. Particular amounts are seen as being within the skill of the ordinary worker. Certainly, if the carrots of the reference will thicken tomato sauce, the entire composition will continue to thicken other products. Therefore, it would have been

obvious to use the claimed product in products which need to be thickened in particular amounts.

Allowable Subject Matter

Claims 7, 10-15 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

ARGUMENTS

Applicant's arguments filed 6-9-08 have been fully considered but they are not persuasive. Applicants argue that tomatoes are defined in the specification as a fruit, and are not suitable in the invention. However, there is considerable question as to whether the tomato is a fruit or a vegetable. In addition, applicants' claims have not excluded tomatoes from the claims, especially in the vegetable section. Even if tomatoes are not claimed, the reference Belmar still shows, combining PME containing carrots with vegetables such as tomato sauce and Mersfelder et al. teach that PME must be deactivated in tomatoes or else the product will be of low consistency. This principle of activating or deactivating enzymes can be applied to other foods containing these enzymes as the enzymes would have been expected to act in the same manner. Belmar teaches that the thickening effect is based in intact vegetable cells (page 5, lines 4-8). Even though the reference does not recognize the benefits of deactivating the PME, PME in fruits and vegetables is an inherent characteristic. Also, Mersfelder discloses that it is known to activate PME gel forming properties of allium by heating in

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water at a time and temperature insufficient to entirely eliminate the allium gel-inducing properties (col. 10, lines 25-34). Mersfelder teaches that the occurrence of gels during low temperature process of tomato products containing allium suggests that pectin enzymes are present in onion and garlic. The prior art teaches product firming is promoted for some fruits and vegetables packed substantially whole at temperatures from 160 to 180 due to activation of PME (col. 2, lines 60-70). Therefore, applicant is using a PME deactivated portion as shown by Mersfelder which is tomatoes, and adding an allium portion in which the PME has been activated which causes gel formation. Applicants have not excluded any partial heating of the untreated vegetables. The particular ratio is seen to have been within the skill of the ordinary worker, particularly since the range is broad, and it is known what each portion will do in the process of thickening. The PME deactivated portion cannot thicken, and the second portion containing PME will be gel forming since that is what PME does at particular temperatures (col. 2, lines 60-70).

Belmar is combined with Mersfelder to show that vegetables containing PME can be heat activated to form gels or deactivated. Not all of Mersfelder is to partial deactivation. Heating to a particular temperature of below 180 causes firming to the product (col. 2, lines 60-70).

Nothing unobvious is seen in the use of the particular ratios as how each of the mixtures react is expected. As in tomatoes, if the PME is not deactivated, the product is runny. Therefore, adding one part runny to one part not runny, should make a usable consistency.

It is seen that it would have been predictable using vegetables containing enzymes which were and were not deactivated, since each component is or is not subject to the enzymes which make for different consistencies in vegetables.

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Helen F. Pratt whose telephone number is 571-272-1404. The examiner can normally be reached on Monday to Friday from 9:30 to 6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Milton Cano, can be reached on 571-272-1398. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published

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applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Helen F. Pratt/

Primary Examiner, Art Unit 1794,

8-7-08